

# STATES DEPARTMENT OF COMMER

Patent and Trad mark Offic

COMMISSIONER OF PATENTS AND TRADEMARKS Address:

Washington, D.C. 20231

FILING DATE APPLICATION NO. FIRST NAMED INVENTOR 08/772**.259** MM92/0212 021171 **EXAMINER** NGLIVEN STAAS & HALSEY LLP

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\_ART.UNIT PAPER NUMBER

02/12/01

**DATE MAILED:** 

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

	Application No.		Applicant(s)	· _ · _ · · · · · · · · · · · · · · · ·	
Offic Action Summary	08/772,259		MASAKI ET AL.		
	Examiner		Art Unit		
	Thong Q Nguyen		2872		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36 (a). In no event, however y within the statutory minim will apply and will expire SIX , cause the application to b	er, may a reply be tim um of thirty (30) days ( (6) MONTHS from to ecome ABANDONED	ely filed will be considered tim he mailing date of this (35 U.S.C. § 133).	ely. communication.	
1) Responsive to communication(s) filed on 11/2	<u>27/2000</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-10 is/are pending in the application	1.				
4a) Of the above claim(s) is/are withdraw	wn from considerati	on.		<	
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-10</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claims are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are objected to by the Examiner.					
11) The proposed drawing correction filed on is: a) □ approved b) □ disapproved.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. § 119					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:		,			
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).					
To the mode of a significant to the significant to		, o e.e. g	. (-).		
Attachment(s)					
15) Notice of References Cited (PTO-892)	18) 🔲	Interview Summary	/ (PTO-413) Paper	No(s)	
16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	19) 🔲		Patent Application (		



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#### **DETAILED ACTION**

## **Drawings**

The objection to the drawings is now withdrawn by applicant's response. In particular, applicant has amended claim 1 by deleting the feature "display" in the claim. As a result of such amendment, the objection to the drawings is now overcome by applicant's response.

# Claim Rejections - 35 USC § 112

The rejection to claims 1-9 as set forth in the previous Office action (Paper No. 23) of 05/26/2000 is now withdrawn by the amendments to the claims as filed in the Amendment (Paper No. 24) of 11/27/2000.

# Claim Rejections - 35 USC § 102

The rejection of claims 1-3 and 8 under 35 U.S.C. 102(b) as being clearly anticipated by Yokoyama (EP reference No. 544 332) is now overcome by the amendments to the claim 1 as filed in the Amendment (Paper No, 24) of 11/27/2000.

### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as described at pages 1-5 and illustrated in figures 11-12 in view of Ishikawa et al (U.S. Patent No. 5,600,455, of record).

The optical device as provided by the prior art which is described in the present specification at pages 1-5 and illustrated in figs. 11-12 comprises the following structural



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features: 1) a light source apparatus having a lamp (7) and a reflector (8); 2) a light guide plate (2) having a light entrance surface for receiving light from the light source apparatus, an inclined bottom surface decreasing away from the light entrance surface, and an exit surface opposite and spaced from the inclined bottom surface for emitting light; 3) a reflecting plate (4) disposed adjacent to the inclined bottom surface of the light guide plate (2); and 4) a light control plate (5) having an emitting surface and an entrance surface having a prismatic configuration which entrance surface faces the exit surface of the light guide plate (2). It is also noted that the light control plate (5) comprises the following features: First, the prismatic configuration comprises a plurality of triangular-shaped projections which are extended in one common direction and repeatedly arranged in a direction perpendicular to the mentioned common direction; and second, the emitting surface of the light control plate is spaced from the entrance surface of the light control plate as can be seen in figures 11-12.

As a result of such a structure, the optical device of the prior art meets almost the features concerning the structure of the device as claimed in the present application. However, the optical device of the prior art does not disclose that only part of the slopes of each prism of the prismatic configuration of the light control plate defines a diffusing surface for the purpose of generating diffused light in a substantially uniform manner and simultaneously reducing the effects of the reflecting plate.

The use of a light control plate having a prismatic configuration wherein only part of the slopes of each prism constituting the prismatic configuration is made as a roughed surface which defines a diffusing surface is disclosed in the art as can be seen



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in the light control device disclosed by Ishikawa et al. In particular, Ishikawa et al discloses a light control plate and teaches the use of a light diffusing profile on a prismatic surface. The roughened pattern formed on one slope of each triangularshaped projection as provided by Ishikawa et al will diffuse the light passing through the projection. See column 3 and figure 7. It is also noted that the making one part of the slopes of each prism of the prismatic configuration as suggested by Ishikawa et al is for the purpose of providing a uniform pattern of light while reducing the effects of stripe pattern of the prior art disclosed in their patent. As clearly disclosed at columns 1-2 and shown in figures 1-5 of the Patent issued to Ishikawa et al, the optical device of the prior art comprises a light guide plate (6) and a light control plate (1) having a prismatic configuration. The slopes of each prism of the prismatic configuration are not roughed surfaces. As a result of such structure of the prismatic configuration, the conventional device in the Ishikawa et al Patent does not provide a uniform pattern when the view of an observer is angled with respect to the optical device (Ishikawa et al, columns 1-2). The formation of coarse surface on at least one part of the slope of each prism as suggested by Ishikawa et al will overcome such a drawback while still providing a uniform pattern of diffused light as clearly disclosed by Ishikawa et al (see column 3). Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the optical device having a means in the form of a prismatic configuration formed on the entrance surface of a light control plate as provided by the prior art by making one side of each prism of the prismatic configuration as a roughed surface as suggested by Ishikawa et al for the purpose of providing diffusing light with



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substantially uniform manner while reducing the effects of the stripe phenomenon. It is also noted that while Ishikawa et al do not clearly state that the formation of roughed surfaces on the prismatic configuration of the light control plate will reduce the effects of the reflecting member; however, such use of roughed surface on at least one part of the slopes of each prism of the prismatic configuration as suggested by Ishikawa et al is inherently given the same result because the combined product provided by the prior art disclosed in the present specification at pages 1-5 and shown in figures 11-12 and Ishikawa will have the same structure.

# Response to Arguments

Applicant's arguments filed on 11/27/2000 have been fully considered but they are not persuasive.

First, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Second, in response to applicant's argument that "Ishikawa et al., as illustrated in FIG. 10, is utilized in a...guide plate" (Amendment, page 12, the last paragraph), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the



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test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the Examiner has not tried to bodily incorporate the device of Ishikawa et al into the body of the conventional prior art disclosed in the pages 1-5 and shown in figures 11-12 of the present application. The teaching of making a part of slopes of each prism of the prismatic configuration as taught by Ishikawa et al at column 3 and figure 7 is the one being used by the Examiner in the rejection.

Third, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Fourth, with regard to applicant's arguments that "Further, Ishikawa et al... scope and breadth" (Amendment, page 13, last paragraph through page 14, first and second paragraphs), the Examiner respectfully disagrees with applicant's viewpoint. Applicant should note that the device as claimed is rejected under 35 USC 103(a) over the prior art disclosed at pages 1-5 and shown in figures 11-12 of the present application in view of Ishikawa et al. The combined product resulted from the modification of the prior art by making roughed surface on one slope of each prism will result that the light is



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diffused (by the roughed surfaces) while the light is radiated within the light control plate having prismatic configuration with roughed surfaces on a part of the prism constituting the prismatic configuration.

## Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is 703 308 4814. The examiner can normally be reached on Monday to Thursday from 7:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou, can be reached on (703) 308-1687. The fax phone



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number for the organization where this application or proceeding is assigned is 703 308 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

> Thong Q Nguyen **Primary Examiner** Art Unit 2872

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